January 15, 2014 1:30 pm to 3:30 pm Working Group Meeting Asmark Agricenter, Bloomington DRAFT NOTES

SUMMARY:

• Updates from Subcommittee Chairs

Point Source:

- Wastewater treatment plants have asked for flexibility to work within existing plant footprints to make updates
- Wastewater treatment plants are exploring the idea of optimization plans to improve nutrient reduction
- Rough draft out to subcommittee by 5 February
- Follow-up meeting 19 February, 10 am to noon at the Illini Center in Chicago

Urban NPS

- Urban NPS is a small source of nutrient pollution in the state, can primarily be addressed through green infrastructure, BMPs, and policy changes
- Rough draft out to subcommittee by 1 February
- Follow-up meeting 24 February, 1 to 4 pm at the Normal Train Station

o Agriculture NPS

- Many existing programs addressing nutrient runoff in agriculture
- Work with programs to develop BMPs, policy recommendations, and science assessments
- Rough draft out to subcommittee before next follow-up meeting at 10 March from 1 pm to 4 pm at the NRCS office in Champaign

Science Team Presentation

- See PowerPoint
- Science Team will run a scenario analysis on BMPs chosen by agriculture subcommittee
 - IWRC will separate the split and fall to spring N application estimates from the agriculture subcommittee meeting exercise

• Target/Priority Watersheds Discussion

- Four tables for both nutrients (N and P) and sources (NPS and point source) will be developed to populate a list of targeted watersheds
- Nutrient loading should be weighted higher than other variables
- Water quality impairments should be expressed in something other than the number of TMDLs—for example, percentage of reaches impaired
- IEPA should consider whether the effects of planning efforts (i.e. watershed plan or KIC priority areas) are positive or negative—are they in fact an indicator of success?
 - TMDLs should not be used as a primary estimate of success for a watershed
- o Drinking water sources, local value (presence of parks, public lands, or protected areas), and biodiversity should be included as additional measures of local benefits
- Methodology for ranking watersheds is by no means set—comments and ideas for improving the process should be sent to IEPA

COMPLETE NOTES:

- I. Introduction
 - a. Working Group Member Roll Call
 - b. Future Meetings
- II. Updates from Subcommittee Chairs
 - a. Point Source—Marcia Willhite
 - i. Concepts into strategy:
 - 1. One size doesn't fit all
 - a. Working within timeline and footprint of a plant to make upgrades
 - 2. Plants creating optimization plans, especially nutrient reduction
 - a. Biological nutrient removal
 - b. Urban NPS—Amy Walkenbach
 - i. See PowerPoint for details:
 - ii. Questions/comments:
 - c. Agriculture NPS—Warren Goetsch
 - i. Panel on longstanding programs
 - 1. Participants from SWCD, NRCS, Dept. of Ag, DNR,
 - ii. New Programs
 - 1. IL Council on BMPs, new changes to IL Fertilizer Act (NREC Board)
 - iii. Emerging Programs
 - 1. Emiquon Project—TNC
 - 2. Trees Forever—IL buffer partnership
 - 3. Long-term watershed studies in Lake Bloomington watershed—TNC
 - iv. Regulatory and voluntary programs
 - 1. Discussion regarding potential regulations with agriculture and NPS source
 - 2. Looked at increasingly stringent regulations and discussed each idea—looked at pros and cons, and discussed: would those kinds of regulations get us where we want to be in terms of nutrient reduction in IL. Conclusion: depends on your perspective
 - 3. Started people thinking about possibilities of regulatory approach
 - v. Existing BMPs, maybe new
 - 1. Priorities etc. for Science Team
 - vi. Next meetings—March 10th—goal: have an initial draft of agriculture NPS, or portion, out for discussion for first meeting
- III. Science Team Presentation
 - a. Scenario Analysis
 - i. Questions, comments, ideas:
 - ii. For things, like cover crops, that generate a product, does cost include product?
 - 1. Yes, included is sale of whatever grown
 - iii. Hearings, point source people—looking at very long construction times, like ten years. Hearing the same points?

- 1. Lots of possibilities. Saying "what if" all the majors were at 1mg, suddenly dropped to 0.8—thus, drops are much smaller as we go. Beyond our analysis. Looking at big reductions.
- 2. Sounds very optimistic, if these numbers are true
- iv. Much depends on the negative P application. How much of that is accurate?
 - 1. Based on one large survey w/ soil samples—over 500 fields. Other data out there. And similar to what Iowa found. Levels of P in fields
 - 2. Tillage is also negative. Assuming one heavy pass, loss of cost
 - 3. And yes, if these are taken out, cost would go up
- v. Scenarios—point source is 1—whole state
 - 1. Yes
- vi. Normalize N and P? (correct question?)
 - 1. Yes—from previous slides
- vii. Point is—something must be done in every acre to achieve these types of reduction
- b. Discussion
 - i. Data collected for Agriculture NPS Subcommittee Meeting—Brian Miller
 - 1. Timing and spilt application—adoption rates may be very different for one or the other
 - 2. Value in going through same exercise at point source meeting?
- IV. Draft Timelines—Marcia Willhite
 - a. Agriculture Draft—around March 1
 - b. Who is writing these?
 - i. The state agencies are writing drafts, based off the comments of the advisory committees
- V. Revisiting Priority Watersheds—Amy Walkenbach
 - a. Example 1: Point Source N: Table sorted by yield, and sorted by point source
 - b. By acre?
 - i. Yields—so pounds/acre
 - ii. Also looking at total for watershed?
 - 1. HUC 8s are somewhat uniform, so could do on total, but it probably wouldn't change much
 - 2. A: Even if we don't do it this way, we should still look at acreage—add that information
 - 3. Could do total pounds per watershed, and that something to look at, especially if the particular watershed is only partly in Illinois
 - c. How many TMDLs?
 - i. Watershed plans, but doing a TMDL for every segment and every pollutant impairing the segment?
 - ii. Are those TMDLs all for nutrients?
 - 1. Yes, N, P, etc.
 - 2. For this table, just N or just P?
 - d. Are points good or bad?
 - i. Points are bad
 - e. Discussion between IEPA and USEPA over listing N impaired waters?
 - i. But Nitrate is listed for drinking water supplies

- ii. So not Nitrogen
- f. Prioritizing watersheds that are impaired, but have a plan?
 - i. Yes, getting more points if TMDLs or plan
 - ii. Will likely have more local involvement
- g. Suggestions: if meeting needs, those should be different points. Impaired watersheds should be tallied separately. There is a reason to keep track of both points.
- h. This table is an example of several approaches—point source nitrate is a smaller problem, and suggest that have to address these to get a reduction, but it might not even need to be addressed, because it's such a small part.
 - i. P—using the same system?
 - 1. Propose using same system for all 4 scenarios
 - ii. This is a process—scenario for process, and then we'll continue working through the process
- i. Nitrate organized by NPS and P by point source, and then easier to organize
- j. What saying is that point source gives a better likelihood of success, because all organized by PS.
 - i. This is a point source table
 - ii. But 4 tables—included the NPS, etc. on different tables
- k. How to look at loading, and the weighting issue of degree of impairment or local degree of success
 - i. Evaluate the process, and not the results at the moment
- l. In nutrient reduction strategy are sections
 - i. In each section, what are the priority watersheds for these sections?
 - ii. There will be different things done for different sources and different watersheds
 - iii. Can't match up the N and P—yes, the maps will be opposites
- m. Points from TMDL—is somewhat disproportionate—might look at the entire waterbody
- n. We can also disagree with IEPA to weight things at all
- o. Giving so many points to TMDL is disproportionate—is duplicative of column G?
 - i. GAO just came out with report on TMDLs that's not very favorable, so need to look at I at all?
 - ii. What about J just watershed based plans, because more stakeholder driven, and know there is some local engagement?
 - 1. At most, maybe a yes or no plan.
 - 2. Just a one or 0
 - iii. Is a watershed plan a positive or a negative?
 - 1. Shows something negative going on in water, or is a positive, because something being done about the impairment?
 - 2. Suggest that neither watershed nor TMDL will mean success—but indicator of problem
- p. Stoner memo—supposed to capture 80%--will this method capture these loads?
- q. How much do the priorities matter?
 - i. Safe to say that many of us have problems with TMDLs—can agree on some TMDLs, and whether a TMDL being done
 - ii. Was based on numeric water quality standard—there isn't one, so will these TMDLs reflect the watersheds that need the most help?

- iii. What about value to local communities—like a state park, etc.
 - 1. Biodiversity/chance of success—might be some way to add a value to this
 - 2. Prioritize watersheds that have drinking water sources and impaired for nitrates
 - a. KIC is working on watersheds with drinking water impairments, and sending a lot of funding that way
- iv. Column G is based on 305b, as a way of trying to capture the Working Group's interest in local benefits and hypoxia problems. J was attempt to address watersheds that might have an existing group ready to work on changes. But this might not be valid.
 - 1. But TMDLs and watershed plans aren't the main goal of this list—but really looking at G
- v. Not saying that chance of success isn't possible, just that a TMDL might not be best way to predict success
- r. Have a lot of problems with this method, but the two major ones are:
 - i. Prioritize by drinking water seems like has little to do with discharge
 - ii. Need a finer scale if looking at bang for buck
- s. Keep this—the 50% rating—want to know how far away from 100%--want to differentiate more finely
 - i. Biodiversity and other scoring might be useful
 - ii. Watershed groups are a tool that give a chance—not a positive, necessarily, but provide a chance
 - iii. So go from 10s—i.e. 10-90
 - 1. Biodiversity
- t. Take a list like this and look at programs and watersheds and steps taking
 - i. Need to make sure we don't list some watershed as important and then don't go address it
 - ii. If a high priority, are we going to do anything about it?
 - iii. Once we see how things fall out, can start addressing that
- u. What does it mean to be on the priority list? Then what?
 - i. Based on the plans, list priorities, then specific actions
 - ii. Where our efforts and money are focused—priority—what do first
- v. Thinking about point source P and NPS N—maybe no focus on point source N, maybe focus is NPS N on down to PS N
 - i. Two tables? Need all four?
 - ii. Simplify for PS P and NPS N
- w. What would be helpful if we could get some information on those tables, should we continue to weight G, I, etc. or some other approach? How to incorporate local WQ issues?
 - i. By the end of next week, get comments and ideas to IEPA
 - ii. Spirit of this—additional values in priorities—getting the dialogue going
 - iii. Please don't take the results of this spreadsheet as a list of set, decided top priorities. Is a work in progress
 - iv. Summarize how other states did this?
 - 1. It's all over the board
 - 2. Anything that stood out as a good idea?